



## Know the Signs and Symptoms of a Stroke



### About Stroke

A stroke or cerebrovascular accident occurs when the blood supply to the brain is cut off (an ischemic stroke) or when a blood vessel bursts (a hemorrhagic stroke). Most strokes are of the ischemic type.

Without oxygen, brain cells begin to die. Death or permanent disability can result. High blood pressure, smoking, and having had a previous stroke or heart attack increase a person's chances of having a stroke.

Stroke is the third leading cause of death in the United States. In 2001, stroke killed 163,538 people, accounting for about 1 of every 14 deaths in the United States. According to the American Heart Association, about 700,000 people in the United States suffer a stroke each year (about 500,000 first attacks and 200,000 recurrent attacks). Four million Americans who have survived a stroke are living with impairments and 15 to 30 percent are permanently disabled. The American Heart Association also estimates that stroke cost about \$51.2 billion in both direct and indirect costs in 2003 in the United States alone.

**With timely treatment, the risk of death and disability from stroke can be lowered. It is very important to know the symptoms of a stroke and act in time.**

### CDC Activities to Reduce the Stroke Burden

**CDC's Heart Disease and Stroke Prevention Program:** CDC currently funds health departments in 32 states and the District of Columbia to develop, implement, and evaluate cardiovascular health promotion, disease prevention, and control programs and to eliminate health disparities. The programs emphasize the use of education, policies, environmental strategies, and systems changes to address heart disease and stroke in various settings and to ensure quality of care. For more information, visit <http://www.cdc.gov/cvh/stateprogram.htm>.

### Signs of a Stroke

The National Institute of Neurological Disorders and Stroke notes these major signs of stroke:

- **Sudden numbness or weakness of the face, arms or legs**
- **Sudden confusion or trouble speaking or understanding others**
- **Sudden trouble seeing in one or both eyes**
- **Sudden trouble walking, dizziness, or loss of balance or coordination**
- **Sudden severe headache with no known cause**

**If you think someone is having a stroke, you should call 911 immediately.**

**Paul Coverdell National Acute Stroke Registry:** CDC established the Paul Coverdell National Acute Stroke Registry in 2001 and currently funds pilot programs in eight states (California, Georgia, Illinois, Massachusetts, Michigan, North Carolina, Ohio, and Oregon) to design and test prototypes to assess acute stroke care in these states. Registry data will help state health departments and hospitals develop plans to reduce death and disability from stroke and improve quality of life for survivors.

**Stroke Networks:** Stroke networks allow state health departments and their partners to share and coordinate prevention activities and advocacy strategies. CDC supports the Tri-State Stroke Network in Georgia, South Carolina, and North Carolina and the Delta State Stroke Consortium in Alabama, Mississippi, Louisiana, Arkansas, and Tennessee.

***Atlas of Stroke Mortality: Racial, Ethnic, and Geographic Disparities in the United States:***

This publication presents an extensive series of national and state maps depicting disparities in county-level stroke death rates for the five largest U.S. racial and ethnic groups. This information will help health professionals and concerned citizens tailor prevention policies and programs to communities with the greatest burden of stroke. An interactive version of the atlas is also available at <http://www.cdc.gov/cvh>.

**For more information:** Visit our Web site at <http://www.cdc.gov/cvh> or the Web sites of the following CDC partners:

American Heart Association*	<a href="http://www.americanheart.org">www.americanheart.org</a>
American Stroke Association*	<a href="http://www.strokeassociation.org">www.strokeassociation.org</a>
National Stroke Association*	<a href="http://www.stroke.org">www.stroke.org</a>
Brain Attack Coalition*	<a href="http://www.stroke-site.org">www.stroke-site.org</a>
Centers for Medicare & Medicaid Services	<a href="http://www.cms.hhs.gov">www.cms.hhs.gov</a>
National Institute of Neurological Disorders and Stroke	<a href="http://www.ninds.nih.gov">www.ninds.nih.gov</a>

**References:**

American Heart Association. Heart Disease and Stroke Statistics — 2004 Update. Dallas, TX: AHA, 2003. Available at <http://www.americanheart.org/presenter.jhtml?identifier=1200026>. \* Accessed January 26, 2004

National Center for Health Statistics. *Health, United States, 2003 Chartbook on the Health of Americans*. Hyattsville, MD: Department of Health and Human Services, 2003. Available at <http://www.cdc.gov/nchs/hus.htm>. Accessed December 12, 2003

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